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“A picture of the land”

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The Charles Close Society was founded in 1980 to bring together all those with an interest in the maps and history of the Ordnance Survey of Great Britain and its counterparts in the island of Ireland. The Society takes its name from Colonel Sir Charles Arden-Close, OS Director General from 1911 to 1922, and initiator of many of the maps now sought after by collectors.

The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.

## ***A picture of the land – an aesthetic appreciation of the depiction of relief on OS small scale maps***

***Aidan de la Mare***

I approach this subject from the view point of both the original meaning of the word *aesthetic* as ‘perception by the senses’, and particularly the refined meaning as ‘relating to, or possessing a sense of beauty’. So, unlike many of the contributions to *Sheetlines* that deal with verifiable facts, this is entirely a matter of opinion and therefore open to question or disagreement. I do not attempt to make more than a passing reference to the development of, or history of, the particular maps as this has been dealt with elsewhere.<sup>1</sup>



The basic OS small scale map from its inception at the beginning of the nineteenth century to the present day can be described as a technical drawing of the land, such as might be seen directly below a balloon or aeroplane in a diffused light that shows no shadows and so gives no indication of relief. The use of hachures on the Old Series one-inch map was an attempt to indicate that the land had a third dimension, but being on the same black plate as the rest of the detail, they tended to confuse the image which remained a rather imprecise technical drawing. The later addition of contours and spot heights, although helping the reader to understand the relief, did nothing to improve the aesthetics of the map.

Then, towards the end of the nineteenth century by changing the hachures to brown they took a step towards showing the third dimension at a glance, but it was not enough. It needed the introduction of the New Series in colour<sup>2</sup> for the OS to produce a picture of the land. But, for this to be effective the shades of colours used for the hachures, contours and roads have to be right. The red hachures give a happier effect than the darker brown of later editions and the paler roads are less intrusive than the stronger burnt sienna ones that followed. But, as often seems to happen, the pioneering effort turns out to be more attractive than the successor. The Third Edition, with its hachures so dark a brown that they seem black, and with added colours, loses the clarity of the New Series in colour, and with it much of the image of relief. Probably unique was the two-inch to one mile *War Department Land on Salisbury Plain* that ran to several editions from 1898 to 1911 in which the relief was shown by horizontal hachures. This is quite an effective system that amounts to very closely spaced contours, but it is less than obvious at a glance which are the

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<sup>1</sup> Yolande Hodson, *Popular maps*, Charles Close Society, 1999, for the experimental maps before 1914 and up to the Fifth Relief Edition. Also Dr Oliver in the series of Charles Close Society booklets on the Fifth up to the Seventh Series, as well as various articles in *Sheetlines*.

<sup>2</sup> Tim Nicholson, *The birth of the modern Ordnance Survey small-scale map*, Charles Close Society, 2002.

ridges and which the valleys.

Just into the twentieth century the OS decided to challenge Bartholomew's already popular half-inch series, and entered that market with their own hill-shaded map. It is quite a nice map that gives a good clear impression of the highlands but is much less satisfactory in the lowlands where the hill-shades merely give a smudgy look to the map and the widely spaced contours do little to help. Their next venture was to add layers as well, which is quite successful in the lowlands, although even there the green base colour is too strong. But where the hills rise to more than 500 feet the map becomes one of the worst ever produced by the OS, so dense are the browns and greys of the higher layers that the hill-shades can scarcely be distinguished and even the map detail is almost unreadable. Fortunately this excursion did not last long as it was separated into two editions, the hill-shaded and the layered versions, and although neither achieved much aesthetic value; the layered version went on to be a competent if less popular rival to the ubiquitous Bartholomew's map.



*Killarney 1913, 'one of the most beautiful and successful pictures of the land'*

The real departure from the map as a technical drawing came in 1913 with the publication of the celebrated *Killarney* map and its immediate successors, and the genesis of this has been fully discussed by Hodson.<sup>3</sup> It is interesting to speculate on the 'might have been' had this development not been interrupted by the First World War and its aftermath. Of these maps I have in my collection

<sup>3</sup> *Popular maps*, pp 21-29.

*Killarney*, as well as *Dorking*, *Ilkley* and *Glasgow* of 1913 and *Belfast* of 1918. There seems little to choose between them in quality; all except *Dorking* have significant mountain areas that most readily justify layers and hill-shading, and the effect is enhanced by these areas being lightly populated, requiring less map detail thus giving a clearer view of the shape of the land. *Dorking* however is both heavily wooded and heavily populated, so is cluttered with all the detail that goes with it, resulting in a rather heavier look to the map exacerbated by the generally stronger colours used throughout. Although there are many areas of hills shown, they are of much smaller scale than on the others, so the effect of the relief techniques is much less noticeable and the immediate appeal of the map lessened.

Several other specimens of relief maps were produced and two are illustrated in Hodson.<sup>4</sup> *Aldershot North* and *South* were also published in both relief and plain styles, but the relief seems to have been of very uncertain quality, showing considerable variation in different surviving examples. On my copy of the *North* sheet the effect is so slight that it is almost completely ineffective, and no improvement on the contemporary plain version with red contours. A batch of relief maps that were derived from *Killarney*, were published after the First World War, five in England and seven in Scotland.<sup>5</sup> These are quite effective with their green base layer and with layers of light brown for the hills augmented by hachures that give a limited hill shading effect as though lit from the north-west. But they lack the refinement and subtlety of the first batch, being a sort of economy version of those maps that set such very high standard. *New Forest* has hachures so lightly drawn as to be ineffective on much of the area, and *London* has uncomfortably dark brown layers above 500 feet, but, fortunately for the map, not much land of that height. *Snowdon* and *The Lake District* have the same browns but they start at a much higher altitude, and so work better. Of the Scottish maps *Deeside* is uncomfortably heavy-handed with the hachures, *Rothsay & Firth of Clyde* has a pleasant light shade of yellow to indicate the heights, but, out of the bunch, *Scott's Country* gets the best balance of hachures and layers.

A whole batch of Tourist Maps followed from 1922 in a plain layered style not dissimilar to the Bartholomew's half-inch maps, quite effective, but layers alone are not enough to indicate the subtleties of the shape of the land. Curiously *The Lake District* of 1925 (my copy 1935) has very prominent grey contours on subtle layers and gives an unusual view of the land, much better than the same map of 1945 where the layers are in much stronger colours, and the red/brown contours are largely lost against them.

Then comes another watershed with the arrival of the Fifth (Relief) Edition

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<sup>4</sup> *Popular maps*, plates 2 and 3.

<sup>5</sup> In England: Third Edition - *Snowdon District*; *Lake District*, Popular Edition - *Isle of Wight*; *London*; *New Forest*. In Scotland: *Burns' Country*; *Deeside*; *Lower Strath Spey*; *Oban*; *Rothsay & Firth of Clyde*; *Scott's Country*; *The Trossachs & Loch Lomond*.



and this has been comprehensively discussed by Hodson<sup>6</sup> and Oliver<sup>7</sup>. There was much contemporary disagreement at the time of publication from 1931, but the outcome was unequivocal; the attempt to sell an artistically advanced map to the public for general use was a failure. I find this regrettable but understandable, for there is no doubt that the plain style that superseded the relief edition is easier to read, but that stands to reason as it is, once again, a technical drawing of the land. A look at the Physical Features Only version of the map shows what an excellent job they made of the relief drawing, it is a very clear and detailed view of the land; but by adding normal map details on top of it, both suffer, the details do not stand out and the land-form gets lost under the details. The two *Aldershot District* maps and the Tourist Maps *Dartmoor* and *Exmoor* are no more than rearranged sheet lines of the numbered maps. But a spin off of the style appeared on Popular Edition Tourist Maps: *Ilkley District* in 1935 in which the rather pale understated Fifth Relief style has been strengthened in the hill shading and contours, somewhat to the detriment of the overall view; and *Snowdon* of 1938 where the hill shading has become heavier still, but even with less prominent contours, it is still too dense.

Of the Scottish maps in the same style *Invergordon to Loch Ness* of 1933 is a very good map to look at, the mountains show their shape very clearly and the relief drawing is appropriately light in the lowland areas so that the map detail still shows well. It is, I think, the best of the bunch, and incidentally has what is perhaps Ellis Martin's most attractive cover. *Oban* of 1936, having a very high proportion of mountains on the map, reverts more closely to the Fifth Relief subtle shading and this works well. *The Cairngorms* also of 1936 however departs considerably from the established yellowy/brown colours of the hill shading, introduces much more grey and much heavier contours, it also has plain green woods and a lot of isolated tree symbols. The overall effect is unique among relief maps and shows the mountain forms particularly clearly, though its very unfamiliarity of style banishes thoughts of comparing it favourably with the yardstick of *Killarney*. The *New Forest* Tourist Map of 1938 has quite a lot of the 'feel' and detail of *The Cairngorms*, with its plain green woods and isolated tree symbols. But the much denser lowland map detail and redder cast make it a less successful map.

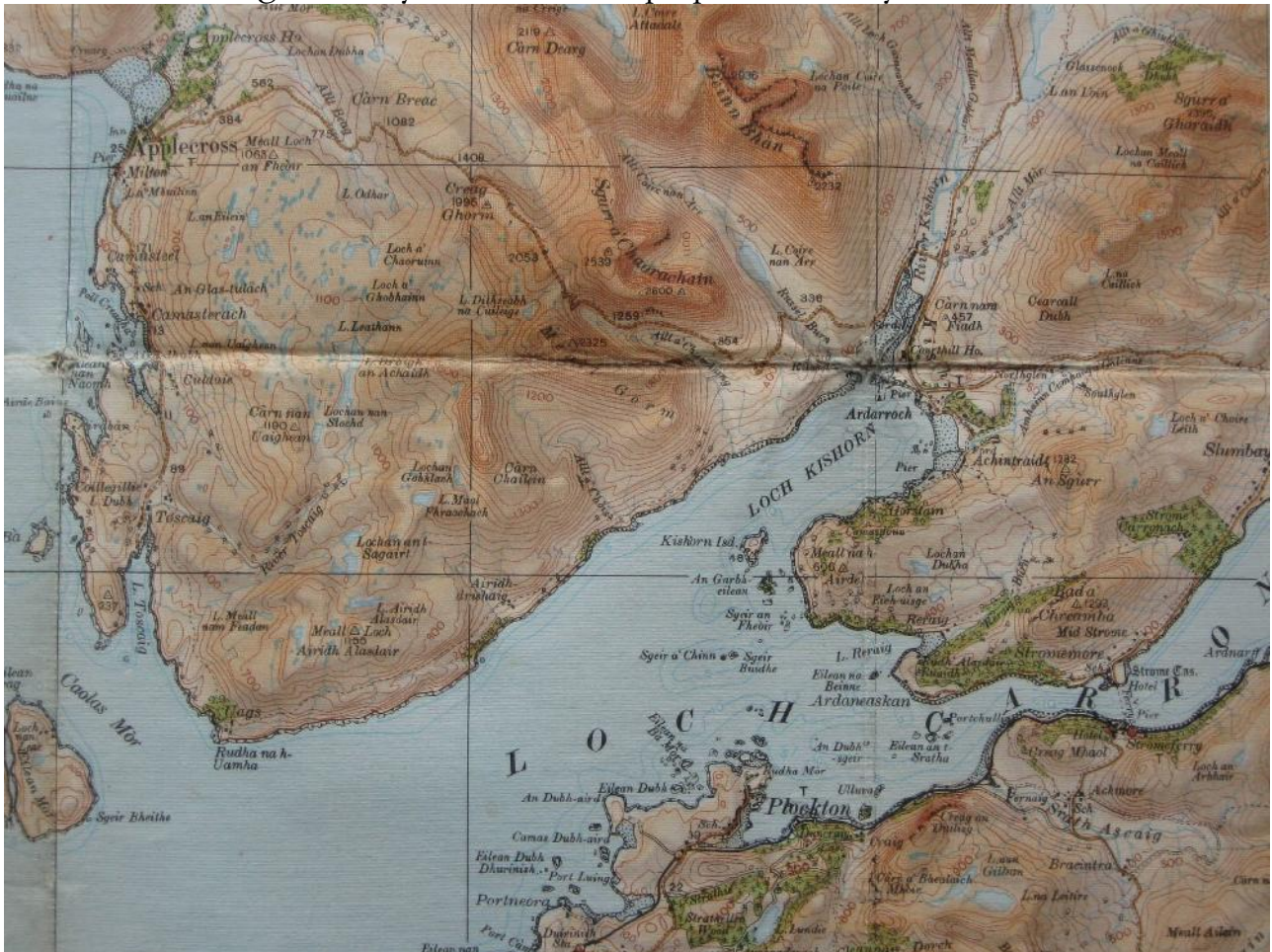
The half-inch map also tried its hand at Fifth Relief style with *The Cotswolds* in 1931 and *Birmingham District* in 1933. Quite nice maps, but the rather dense map detail tends to overpower the relief, the place names are written so small that they are difficult to read and many small patches of woodland on *Birmingham* add further confusion. The *Peak District* of 1936 reverts to layers, but not much of the map actually uses these layers, as only a relatively small part of the large area covered is high ground. So although easier to read than the relief maps it still suffers from too great a density of detail in the lowlands. The *Island of Skye* of 1932, the only departure at this scale in Scotland, is a

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<sup>6</sup> *Popular maps*, pp 211-213.

<sup>7</sup> *A guide to the one-inch Fifth Edition*, Charles Close Society, 2000.

triumph. The all-brown Fifth Relief style is especially suited to the mountainous islands that stand up dramatically from the pale blue sea. The picture of the land is enhanced by the small amount of place names and other map detail due to the light population of the islands, and the ridges of the mountains show up particularly clearly although the shading is quite lightly applied. All this suggests that this is among the very best relief maps published by the OS.



*Island of Skye 1932, 'among the very best relief maps published by the OS'*

The quarter-inch Second Series maps have such crude hill-shading that it would have been better left off. But mention should be made of the interesting Royal Air Force Third Edition of 1936 with its purple layers and very prominent railways that gives an unusual and surprisingly clear view of the land, which was, I suppose, just what it was meant to do. At the two-inch scale came *Jersey* of 1914 (my copies 1924, 1934 and 1958). The 1924 edition has a green base and layers of light brown and pink above; these, with rather ill-defined hill-shades, combine to make a gloomy map. The 1934 revised edition omits the layers and strengthens the hill-shades to produce a better effect, but is still rather dull. The 1959 version is further curtailed and has contours only. At the same scale *Isles of Scilly* of 1933 (my copies 1937 and 1959) is a spin off from the Fifth Relief. The 1937 printing works well, having quite a lot in common with *Island of Skye*, but lacks the impact as the islands are so small. In the 1959 printing, however, the relief has become so washed out that it is completely ineffective.

With the advent of the one-inch Seventh Series, a new batch of Tourist Maps followed. These display several varieties of the basic layer and hill-shaded formula of the pre-war relief maps. As I have accumulated several printings of each map, I can, to some extent, compare the development and variations that have occurred in the forty or so years that was their lifetime. The first two, *The Peak District*, 1957 and *North York Moors*, 1958 have layers beginning with a pale green base rising through pale brown to a medium brown in the highest areas. The hill-shading is lightly applied, and makes an attractive and efficient map, but the colouring of layers and contours darkens in later printings, but lightens again with the late 1:50,000 derived version that introduces a pinkish colour for the highest layers. *The Lake District*, 1958, *Lorn and Lochaber*, 1959 (later changed to *Ben Nevis and Glen Coe*), and *Loch Lomond and the Trossachs*, 1961 are all similar with a green base layer and above that very subtle shading of pale browns that do not form separate layers, but have rather prominent hill-shades. *The Lake District* suffers darkening of colours and contours in mid term with the C edition of 1966 only to lighten again in C5/\* of 1977, and then dark again in the 1:50,000 derived B edition of 1994. The other two remained little changed through their lifetime. All these are good maps with effective depiction of relief in mountainous areas, but they lack star quality.

As with its pre-war edition, *Cairngorms*, 1964 is also a departure from the established style. The A edition was unique in having cased white main roads, and all editions have green tree symbols instead of green background colour for woods. The base layer is green, which becomes a fierce green on A//, 1973. But, as almost all land on the map is over 1000 feet it is overwhelmingly brown with patches of mauve over 3000 feet. For a Tourist Map it covers an extraordinarily high proportion of uninhabited and almost inaccessible land. But it is a fascinating map to study for a southern Englishman who will never go there; it could be described as more interesting than beautiful. *Wye Valley and Lower Severn* of 1961 (the only printing) is unremarkable, being a plain layered map. But it does raise the question whether the Seventh Series would have benefited by being offered in this form for general use. In this, and GSGS 4620A, wherein layers were added to New Popular Edition mapping, the layers add a lot to the normal one-inch map, without unduly confusing its readability.

*Dartmoor* and *Exmoor*, both 1967, reverse the trend of the other maps of this series in that the layer colouring and hill-shading gets lighter as they were reprinted, which is just as well because the blue and purple above 1000 feet and reddish brown down to 700 feet is not a good choice aesthetically, whatever else it achieves. The 1:50,000 derived version of *Dartmoor* in 1985 reverts to a much happier range of browns above 300 metres and a range of yellows below that to a pale green base layer, which, coupled with lightly applied hill-shades gives a much more pleasing map while still clearly showing the shape of the land. *Exmoor* started similarly to *Dartmoor* but is less strident in its colouring, and gradually softened even that, so that B4 of 1990 the last of the Seventh Series is also the best printing of that map.

*New Forest* of 1966 was a curious exception in that the ground colouring indicates, not altitude, but 'predominant vegetation' wood, downland, meadow and heath. Relief is shown by hill-shades and spot heights, but not contours until the 1:50,000 derived edition of 1985 which includes contours. The A edition has a curious almost malachite green for the woods with prominent black trees, but by B/\*\* of 1976 the woods have faded to a pale green and the trees much reduced in prominence, a definite improvement. The C edition reverts to normal woods green but the tree symbols have faded even further and are absent from many of the woods, but the yellows of meadow and downland have grown in strength, and that is not an improvement. It is no surprise that the OS did not repeat the 'predominant vegetation' experiment, for, although the map is quite nice to look at, the wrong message is sent to the reader who is expecting the colouring to represent altitude.

The half-inch *Snowdonia* began life as the layered numbered sheet 28 in 1961, but was transformed in 1966 into *Snowdonia National Park* with the addition of hill shades and on revised sheet lines. It follows the sequence of getting lighter in later printings, but fails aesthetically by having map details that are too prominent, which allows the roads and the park boundary to distract from the land form. It does, however, draw our attention to the regrettable absence of a good general purpose map of the country at this scale. The 1:250,000 (quarter-inch) Fifth Series of 1960 departs from the layered style of the previous Fourth Edition at this scale by adding hill-shades. This produces a colourful map giving a good overview of mountainous country, but offering little more than occasional grey smudges to lowland country. *Wales and the Marches* Special Sheet of 1959 goes through the sequence of the hill-shading getting lighter in successive printings, so that the last in 1976 is the best.

There only remain two oddities; the isolated experiment with Landranger 124 *Dolgellau* of 1995 in which smudged hill-shading was, apparently rather casually, applied to the mountains. But it can only be described as a failure. The other is the surprising appearance in 1992 of the one-inch *Yorkshire Dales* Tourist Map, derived from 1:50,000 material. It made a rather better job of the hill-shades than *Dolgellau*, but there seems some doubt as to where the light is coming from; the convention being from the north-west, but on this one it seems to be more like due north. A nice map but by no means outstanding.

This survey has been confined to the maps in my collection that I have been able to examine alongside each other, but I don't think I have missed any others that are worthy of consideration. The only others that might be contenders are the experiments discussed by Hodson,<sup>8</sup> but these were not published and I have not seen them except as illustrations. My conclusion is, rather unimaginatively, that it is the famous *Killarney* and its immediate successor *Ilkley* that can claim to be the most beautiful and successful pictures of the land, followed closely by *Invergordon to Loch Ness* and *Island of Skye*. But, of course, this is open to question, being only my opinion.

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<sup>8</sup> *Popular maps*, pp23-29.